

FIG. 1

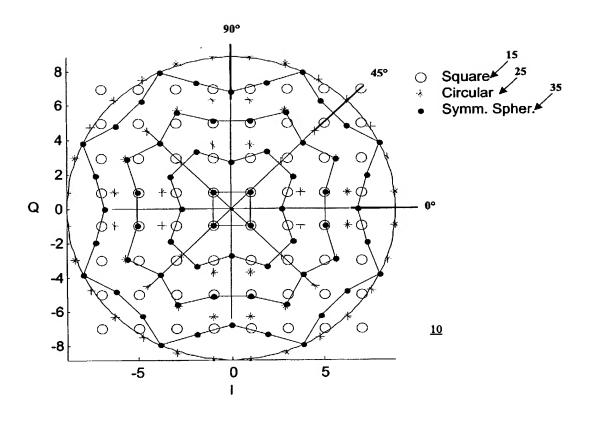
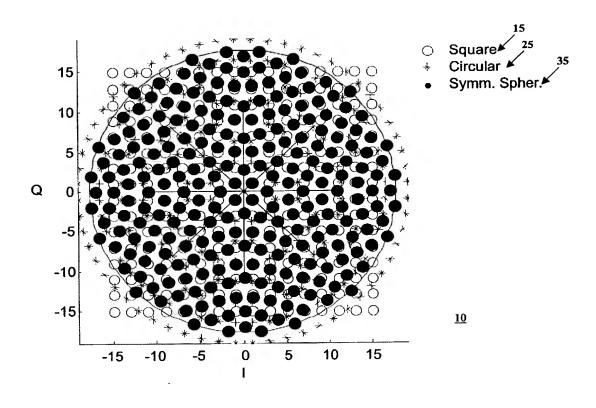
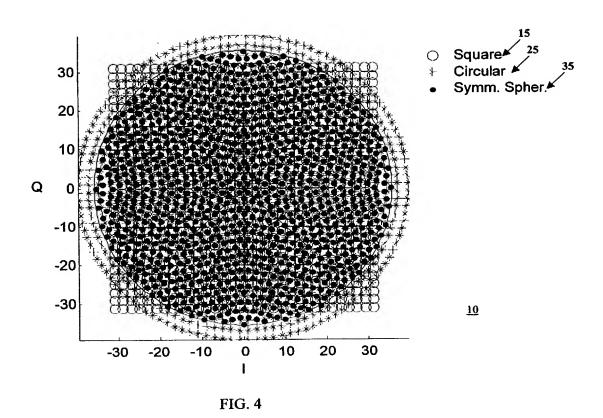


FIG. 2





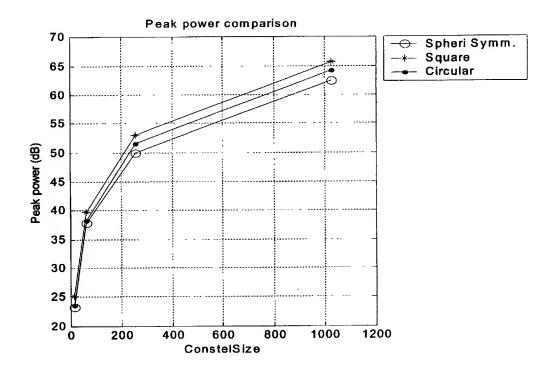


FIG. 5

FIG. 6a

	Square Constellation				Circular Constellation				Spherical Symmetric Constellation			
QAM size	Peak Power	Average Pover	Average Power (dB)	PAR (dB)	Peak Power	Average. Pover	Average Power (dB)	PAR (dB)	Peak Power	Average Power	Average Power (dB)	PAR (dB)
16	18	10	10	25627	14,9282	11.696	10.6804	1.0597	14.7005	9.7162	9.87496	1.7984
64	98	42	16.2325	3.6798	79.77	50.5932	17.0409	1.97747	78.3406	40.4231	16.0863	2.8736
256	450	170	22,3045	4.2276	355.0898	206.2193	23 1433	2.4807	312.9502	160.2957	22.0492	29055
1024	1922	682	28.3378	4.4997	1558.2479	828.7357	29,1842	274221	1265.1433	638.8297	28.0539	29675

Note: $minimum distance d_min = 2$

FIG. 6b

QAM Constellation size	Peak Power Reduction (Sq./Sph) (dB)	Peak Power Reduction (Cir./Sph) (dB)	PAR Reduction (Sq./Sph) (dB)	PAR Reduction (Cir./Sph) (dB)	
16	0.879403987	0.066753385	0.754368445	-0.7387	
64	0.972391823	0.078526986	0.806195079	-0.8961	
256	1.577372803	0.669244662	1.322102313	-0.4248	
1024	1.816136635	0.904968304	1.532143876	-0.2253	

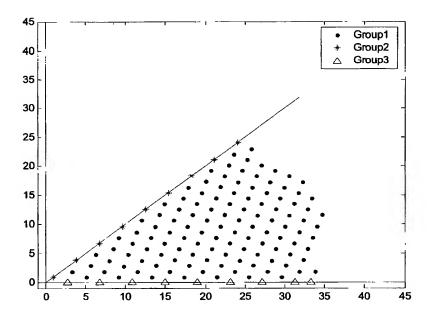


FIG. 7



